

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/596,129	06/16/2000	Manfred Reithinger	00P7685US	2660
759	90 11/20/2002			
Richard Sharkansky			EXAMINER	
Daly Crowley & Mofford LLP			CAO, PHAT X	
275 Turnpike St	reet		CAO, PI	HALX
Suite 101			A D.T. I.B.II.T	DADED MUMDED
Canton, MA 02	2021-2310		ART UNIT	PAPER NUMBER
			2814	
			DATE MAILED: 11/20/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Commons	09/596,129	REITHINGER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Phat X. Cao	2814			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status					
1) Responsive to communication(s) filed on 18 June 2002.					
2a) This action is FINAL. 2b) This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4)⊠ Claim(s) <u>1,3 and 5-15</u> is/are pending in the application.					
4a) Of the above claim(s) 8-15 is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1,3 and 5-7</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)⊠ The proposed drawing correction filed on <u>18 June 2002</u> is: a)⊠ approved b)☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9	5) 🔲 Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)			
U.S. Patent and Trademark Office PTO-326 (Rev. 04-01) Office Ac	ction Summary	Part of Paper No. 12			

Art Unit: 2814

#### **DETAILED ACTION**

1. The cancellation of claims 2 and 4 in Paper No. 11 is acknowledged.

#### Election/Restriction

2. Newly submitted claims 10-15 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: newly submitted claims are directed to a wafer having a fusible link connecting a bus disposed in one of the plurality of chips and a corresponding one of the plurality of electrical components. On the other hand, the original claims are directed to a wafer having a plurality of voltage generators and an electrical conductor elevated above the regions in the fractional portion of the wafer.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 10-15 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### Claim Rejections - 35 USC § 112

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2814

Claim 3 is unclear because it depends on canceled claim 2. For examination purpose, claim 3 is assumed depending upon claim 1.

# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Tagaya (JP. 6-13447).

Tagaya, in Fig. 4 and abstract, discloses a semiconductor wafer having a plurality of integrated circuit chips thereon, such chips being separated by separating region in the fractional portion of the wafer; a plurality of sets of electrical components 10, each set being associated with, and adjacent to a corresponding one of the chips; and an electrical conductor 13 electrically connecting the plurality of electrical selected one of the electrical components 10 to the chips with portion of the electrical conductor 13 spanning the separating regions 16 between the chips in the fractional portion of the wafer; wherein each one of the electrical components 10 is voltage signal generators (see abstract) and is disposed in the separating region 16.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2814

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Egawa (US. 6,066,886).

Egawa, in Figs. 1 and 3, discloses a semiconductor comprising: a fractional portion of a semiconductor wafer having a plurality of integrated circuit chips thereon, such chips being separated by separating regions in the fractional portion of the wafer; a plurality of sets of electrical components 4, each set being associated with, and adjacent to, a corresponding one of the chips; and an electrical conductor PX (see Fig. 3) electrically connecting the plurality of electrical selected one or ones of the electrical components 4 to the chips with portions of the electrical conductor spanning the separating regions between the chips in the fractional portion of the wafer (see Figs. 3 and 4); wherein the electrical components 4 are voltage signal generators, and each of the electrical components 4 has a plurality of different electrical components.

Art Unit: 2814

# Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tagaya or Egawa in view of Murari et al (US. 5,696,404).

Neither Tagaya nor Egawa discloses the electrical conductor formed on a dielectric member and above the regions in the fractional portion of the wafer.

However, Murari (Fig. 5) teaches the electrical conductor 12 formed on a dielectric member 14 and above the regions in the fractional portion of the wafer. Accordingly, it would have been obvious to form the electrical conductor of Tagaya or Egawa on a dielectric member and above the regions in the fractional portion of the wafer in order to ensure that the electrical conductor does not short out with the other electrical conductor and to insulate the electrical conductor from the surface of the wafer substrate, as taught by Murari (column 4, lines 11-20).

## Response to Arguments

10. With respect to Tagaya, Applicant argues that an auxiliary circuit 10 cannot be interpreted as voltage generator as claimed.

Art Unit: 2814

It appears that Applicant argues that voltage generator as claimed <u>must</u> be a power supply voltage generator, but not a signal voltage generator. However, the limitation of having a voltage generator as a power supply voltage generator does not seem to be required by the claim language. Therefore, the auxiliary circuits 10 of Tagaya can be interpreted ad "voltage generators" as claimed because each of the auxiliary circuits 10 generates the voltage signal.

Similarly, with respect to Egawa, the memory circuits 4 can be interpreted as "voltage generators" as claimed because each of the memory circuit 4 generates the voltage signal.

#### Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2814

12. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Phat X. Cao whose telephone number is (703) 308-4917. The Examiner

can normally be reached on Monday through Thursday. If attempts to reach the Examiner by

telephone are unsuccessfully, the Examiner's supervisor, Wael Fahmy, can be reached on

(703) 308-4918.

Any inquiry of a general nature or relating to the status of this application should be

directed to the Group receptionist whose telephone number is (703) 308-0956. Group 2800 fax

number is (703) 308-7722 or (703) 308-7724.

PC

November 15, 2002

PHAT X. CAO